COMPUTERIZATION OF AGRICULTURAL LOAN DISBURSEMENT – A CASE STUDY OF INTERCITY BANK PLC

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CERTIFICATION

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DEDICATION

This project is dedicated to Almighty God and to my beloved mother, Mrs. Olayinka Bonire.

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My acknowledgement goes first to Almighty God, who has made it possible for me to produce this project. I wish to pronounce my gratitude to my Supervisor, Dr. Y. M. Aiyesimi who has given 90% of his time to see that this project work comes to a reality.

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ABSTRACT

Intercity Bank Plc. is a commercial bank that operates in banking and also grants credit to various sectors of the economy.

This write-up has thrown more light on Agricultural loan disbursement – The credit facility is expected to be properly managed and this can be best done with the computer. The existing system in the bank is found to be inefficient, that is why a new system is introduced in order to facilitate efficient management of credit facility to agricultural sector.

Managers/officer delivering credit facility to various sectors should be vast in operating computers and they should be given adequate training. Where there is proper planning, loans will be advanced in good time, thus, enhancing the development of various sectors of the economy. The system designed is required to be well implemented, managed, controlled and exercise the usual cautions of granting loans.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BRIEF HISTORY OF BANKING IN NIGERIA

The structure of banking in Nigeria was tailored toward that prevailing in United Kingdom with feature of branch banking system. A special feature of the branch banking is that of the single banking company-conducting operation at two or more places with the branches usually controlled for a central point.

The first bank to be established in the country was the Africa Banking Corporation in 1892 by Elder Dempster and company but later wounded up business due to some difficulties. Soon after, there was the British Banking of West Africa (now First Bank) in 1894 followed by Barclays Bank DCO (now Union Bank) in 1917. The first indigenous Bank was National Bank of Nigeria Limited in 1933, followed by Agbonmagbe Bank (now Wema Bank) in 1945. Another British and French Bank was established in 1949 (now U.B.A.).

Things began to change when the country gained internal autonomy in 1957, which led to Federal recommendation of Central Bank in 1959, which later began operation on 1st July 1959. The establishment of Central Bank was regarded as a watershed in annals of Nigeria banking as it laid the foundation for the money and capital market and subsequent establishment of the Lagos Stock Exchange in 1961.

Today, Central Bank Act of 1958, Company Act of 1968, and Banking Act of 1969 govern statutory control and regulation of banking operation in the country.

1.2 HISTORICAL BACKGROUND OF INTERCITY BANK

Intercity Bank Plc. is a commercial Bank wholly controlled by the Central Bank of Nigeria. The Bank is a public limited liability company with private individuals and organizations as the main shareholders. Although Intercity Bank (ICB) started as a state-owned Bank, but is currently owned by corporate bodies and individuals.

ICB commenced operations in October 1988, its main business is commercial banking. ICB had a fully paid-up share capital of N110.0 million, as at June 30, 1997 which has been increased to N631 million to meet the minimum capital requirement as stipulated by the Central Bank of Nigeria.

As a growing institution, ICB has been building its competitive strength through investments in people, system and operation resources. Business-wise, a strategy of differentiation in services quality and cost control is being pursued. Of recent, ICB relocated her Head Office from Minna to Kaduna. Currently, the Bank has eight branches located at Minna, Victoria Island, Suleja, Yaba, Kaduna, Kano, Balogun and Abuja. ICB has gained approval to open branches in Gusau, Zaria, Kaduna South, Port Harcourt and Ilesha.

Departments such as Treasury and International Remittances are located in Lagos while Administrative offices are maintained in Kaduna. For overseas business, the Bank uses amongst others a German and British Correspondent Banks, both noted for efficiency and global presence.

THE PROSPECTS OF THE BANK

It was observed that for proper implementation of Agricultural Credit Guarantee Scheme and the guidelines stipulated by Central Bank of Nigeria, Intercity Bank has recorded some impressive achievement in its operations. Also, it has restored the lost confidence in agricultural sector in banking industry, by lending to the farmers who operate under the small-holder direct loan scheme.

As a result of the well-packaged holder loan scheme being operated by various Agricultural and Co-operative banks in Nigeria. The Federal Government directed, in her budget of 1986 that all commercial banks should incorporate amongst their products, lending to small farmers and directive got a legal backing by Decree No. 18 of 1988.

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It was also noted that after the Federal Government directives, the Central Bank of Nigeria gave some sectoral allocation to loans/credit – Agricultural sector was given 18% of the total credit which is the second and also that a minimum of 20% of the loan portfolio should be allocated to small-scale enterprises.

In the process, it was observed that a lot of problems are being encountered over the years. They include staffing and high cost of administration, which involves too much clerical work and equally time consuming thereby making disbursement of the loan funds to take a longer time than necessary. In order to overcome some of the above-mentioned problems, there is the need to introduce the modern technology, which is the computer.

For adequate utilization of funds immediately the rain commences, there is need to critically examine the aims and objectives of the study. This includes:

(a) The Management of ICB should provide a comfortable environment for processing and updating customer's records like computer-based system.

(b) Timely information should be provided for effective management, planning and control.

© The system of keeping and retrieving records as at when due should be encouraged.

(d) There should be accountability and also ensure that accurate records are stored.

(e) With the use of an electronic form of capture and storage customer's data, there will be reduction in workload of clerical staff.

(f) The main objective is to minimize cost and maximize profit.

(g) The understanding of hardware and software applications by the management.

However, it is well known that to achieve these objectives, a lot of work has to be done because improper record keeping has been observed in the disbursement of the loan funds and this forms the basis of this study so that solutions could be sought for effective, timely and accurate loan system.

CHAPTER TWO

2.0 AGRICULTURAL LENDING SCHEME

Most importantly, Intercity Bank Plc. operate under the following schemes:

(i) On Lending:

Lending made to established institutions against repayment guarantee for onward lending to enterprises.

It is a system that made available loans across to small-scale farmers through intermediaries such as State Agencies, Co-operatives, Agricultural Development Project and River Basins and Rural Development Authorities.

(ii) Direct Lending:

Here the Bank deals directly with the individuals and organizations without any intermediary. The beneficiary is required to produce a certificate of occupancy or a well-secured collateral security.

(iii) Small Holder Direct Loans:

This is designed especially for small farmers who produce the bulk (at least 90% of the nation's foods. Conditions like the certificate of occupancy or any security are waved. The farmers only certifies the bank by evidence of large farmland belonging to him, the group or his immediate family. Small-holder loans has been a success in terms of utilization and recovery. The scheme is very beneficiary as a result of economic hardship and retrenchment in both private and the public sectors.

(iv) Workers Scheme:

Due to the current retrenchment of workers both in private and public sectors of the economy, the bank created an avenue for such people to earn a living on agricultural revolving loan allocated to each state branch of the bank for such purpose. The only security required is a guarantee of adequate standing.

(v) Marketing Loans:

This scheme is created to reduce the problem of farmer's poor transportation and inadequate marketing facilities. The bank has resolved to grant of this loans to customers to enable them purchase excess crops during harvesting

This scheme is created to reduce the problem of farmer's poor transportation and inadequate marketing facilities. The bank has resolved to grant of this loans to customers to enable them purchase excess crops during harvesting seasons. This scheme has eliminated wastage and served as an incentive to farmers to produce more crops to the economy.

However, the above programme can only be operated subject to the following conditions expected of the individual/organization by the Bank. These include:

(a) Viability of project:

The project in question must not be in conflict with any policy or act and must commercially be satisfactory to make returns on investment.

(b) Status of Applicant:

The applicant must have the ability to manage project in a sound and competent manner over a minimum period equal to the period. Processing and marketing of agricultural goods must be the main objective of the applicant. He or she must have good and reputable character.

© Borrowing power and ability to repay:

The bank determines this, after ascertaining the income and expense of the applicant.

(d) Availability of Land:

The Bank does give loan for acquisition of land, so the customer/applicant must have farmland already situated in a given place to guarantee the loan made available to him and his reputable character.

2.1 IMPORTANCE OF AGRICULTURAL LENDING

Agricultural lending scheme is of great importance to a developing country like Nigeria and of value to the less privileged in the society, especially as it helps to improve the standard of living of people. Therefore, the importance is as follows: -

(i) Extension of credit facilities to the less privileged members of the society who benefit from the services of conventional banks.

(ii) Provision of opportunities for self-employment for the vast unutilised and under-utilized manpower resources in the country.

(iii) Complementing Government's efforts in improving the productive base the economy.

(iv) Inculcating banking habit at the grassroots level and reducing the rural to urban migration.

(v) Eradication of poverty and provision of succour for the betterment of the Nigeria citizens.

(vi) Bringing relief to the financially marginalized groups in the society.

(vii) Cushioning the painful effects of the structural adjustment programme on the depressed sections of the economy.

2.2 SYSTEM OF LOAN DISBURSEMENT

The disbursement is carried out in three phases to affect the actual process of farming. Disbursement is done when all completed documentation is lodged in acceptable form with the bank and the bank official has completed his inspection to the various farmlands.

(i) First Disbursement:

This is when the first or second rain has falling, the disbursement is given to enable the farmer clear the farmland and then start cultivation.

(ii) Second Disbursement:

This is to enable the farmer to employ labour for the first and second weeding of unwanted grasses within the farmland.

(iii) Third Disbursement:

This is the last disbursement for harvesting and transportation of the crops to the consumer.

From the time a customer lodge in application up till the time of disbursement is a long procedures, which are often cumbersome and full of errors due to the manual process involved. But with the implementation of computerization of the system, it is better imagined when customers will notice how fast they can obtain their balance within a computer terminal in their front. Civilization has made computers part and parcel of humanity.

CHAPTER THREE

3.1 FEASIBILITY STUDY

Before the implementation of the system, there is need to carryout feasibility study to ascertain the proposed system in question and to achieve this, the followings have to be considered: -

a. What is in existence before?
b. What is the project request?
c. What is required to be accomplished by the system?
d. Is there any need for the new system?

To achieve this, the size, cost, financial and technical feasibility of the project have to be determined. During investigation, it was discovered that Intercity Bank Plc. activities/transactions are numerous and because of this, the study was limited to computerization of agricultural loan disbursement. With the determination of the size of the project, the cost will equally be determined and this will involve computers and training of personnel.

The operational efficiency of the system will be equally determined and this is a factor of technical and financial capability of the organization. In any system, growth is the keyword, therefore it is required that findings are reported to management for decision making in order to determine growth.

3.2 OPERATION OF THE EXISTING SYSTEM

Intercity Bank Plc. is a commercial bank and it has branches in Port Harcourt, Lagos, Gusau, Abuja, Minna, Kano, Zaria, Suleja, Katsina, Kaduna; it's payroll has been computerized at the Head Office, but the main functional activities of the bank right from customer desk appraisal to loan disbursement and recording of repayments received are processed manually.

Efforts have been made by the Bank's management to acquire computers so as to computerize all transactions, but some branches are yet to be taken on. File management is of great importance in the bank and this area needs to be computerized so as to enhance updating and calculation of mid/monthly interest on loan disbursed/given.

3.3 PROBLEM WITH THE EXISTING SYSTEM

Intercity Bank Plc. operations are not yet computerized, therefore, it cannot be without some hidden problems. The main problem with the operation of the system is the volume of paper work and time consuming, and moreover, result arrived at are not accurate. For example, for a large scale loan to be approved and disbursed, about two to three reams of paper will be required and it may take about two to two and half months before completion of the process to final disbursement, at times, it takes longer than that and this affects implementation of a project at the right time. Another major problem is the procedure for loan approvals. The volume of work involved is too much and would need to be reduced to a manageable size with the aid of computer. With the problems associated with the manual system, there is urgent need for modern need for modern management techniques via computerization.

3.4 BENEFITS OF THE PROPOSED SYSTEM

This new system being proposed will go a long way to achieve its desired objectives, which include: -

(i) Efficient: Computer based system design can be applied in any organization and this brings about efficiency. Given opportunity for more volume of work to be carrying out at a faster rate.

(ii) Security: There is a back up of any work produced and these are stored in a given place in case the original copy is damaged or lost.

(iii) Hard copies: Any work done using the computer can be produced on a hard copy using the printer.

(iv) Accuracy: Due to the manual system in operation, the system is subject to inaccuracy but with the new system, greater accuracy will be achieved.

(v) Retention and storage: The work executed using computer can be retained and stored for use at a later date.

(vi) Reliability: With the new system in place, works done are reliable and the output of the work are also reliable than manually executed one.

(vii) Speed: Intercity Bank Plc. work has mostly been manually executed and a lot of time wasted, this new system will enhance speedy execution of work which will further lead to overall efficiency of the bank.

(viii) Timeliness of information: Through the use of this system, information request from customer is processed in a matter of seconds. And if the computers in the branches of the bank are linked together through the telecommunication network, it doesn't matter in which of the branches an account is maintained, information can always be obtained with minimum delay.

3.5 TESTING PROJECT FEASIBILITY

Project feasibility can be tested using the followings:

(i) Operational feasibility

(ii) Financial feasibility

(iii) Technical feasibility

OPERATIONAL FEASIBILITY:

Operational feasibility has to do with the workability of the system when it is in place. Though the system has not started, it is believed that it will not pose any problem when installed but rather lead to effective performance.

FINANCIAL FEASIBILITY:

A lot of money is being spent by the management on paperwork which seems to be on routine basis, by implementing this new system, it is believed that the cost of loan management administration will be greatly reduced and thereby reducing overhead costs.

TECHNICAL FEASIBILITY:

This seeks to know whether the project can be embarked upon using existing machineries, technology and available personnel. From my study, I discovered that Intercity Bank Plc. already have a good number of computers in stock and what they need is to improve on the existing manpower by training personnel for effective handling of the system to increase their operational efficiency.

Any project to be considered feasible must have gone through the above-mentioned tests. Intercity Bank Plc. therefore stand to gain from this new system because the technical, operational and financial feasibility are attainable by the bank.

CHAPTER FOUR

4.1 SYSTEM ANALYSIS AND DESIGN

Analysis of a system is the procedural study of its operations with an attempt to discover what its basic problems are. The analyst must examine all the facts he has gathered in order to make a proper assessment of the existing system. In some other words, it can be said to be a process, which is similar to problem solving, since it involves steps or a number of steps that can be applied to any study.

The aim is to ensure that all feasible alternatives are eventually produced. Here, the principle of procedure comes in. This enables one to determine the strength and weakness of the system. The procedures or principles used include:

(i) Purpose: Are the purposes being satisfied? Are they still necessary? Could they be achieved in any other way?

(ii) Economical: Are there more economical methods? Since the benefits should be related to cost of producing the systems.

(iii) Workflow: Are the workflows satisfactory?

(iv) The three 'S': Are specialization, simplification and standardization being practised? Is the work capable of being carried out by machine? Can the complex procedure be simplified? Are standard practices observed?

(v) Flexibility: It is necessary to ensure the system's flexibility, so as to know the effect on the system, as there may be increase or decrease in work volumes to be processed.

(vi) Exception principle: Factors requiring action should be highlighted and not submerged in a mass of routine detail.

(vii) Reliability: How reliable is the procedure? What provision is there for such events such as staff sickness, systems breakdown? Could more up-to-date equipment be justified?

(viii) Existing system: If a change is made, what equipment and other facilities currently being used could be incorporated in the new procedure?

(ix) Continuous control: What types of error are occurring? Are the controls satisfactory? What other types of controls could be used?

(x) Time: Time is an important measurement in every work of life so then, it is important to determine, if information produced is on time, for meaningful action to be taken.

In conclusion, the system analyst should discuss the requirement specification with user, and at the end of this discussion, the requirements specification should be in an accepted form, estimates for alternative designs should be prepared and decision to proceed with a particular design can be adopted.

4.2 SYSTEM DESIGN

A system is set of element or components that are formed and interact to accomplish goals or objectives; the relationship between the elements determined how the system works. While design can be defined as the drawing or outline from which something can be made.

System design therefore is the analysis of the current problems used at the beginning of system design to develop objectives for a proposed system.

The analysis may lead to a number of possible alternative designs. For example, different combinations of manual and computerized elements may be considered, once one alternative has been selected, the purpose of the design stage is to work from the requirements specification to produce a system specification. The system specification will be a detailed set of input documents, forms, report layout which provide details of all features of the system. Here the analysis by applying judgement, skill and knowledge can interpret the requirement specification to create one or more system specifications. This type of specification provides detailed documentation of an entire system. It serves as:

(a) Communication to the management, programmers, operating staff and users

(b) Provides complete record of the system used for evaluation, modification and training purpose.

The system should be well documented as analyst whose design can go to other project or change employment. Therefore, in an effort to design a system to manage files in the bank, the following were examined so as to get facts about the existing system, which equally assisted in designing the new system.

(1) Interview: This is the most used tool and most productive. Facts about the operation of the bank and its attendant problems were gathered. During the investigation, most of the workers opted for simplification of the existing system so as to reduce cost and time wasting. Some customers of the bank interviewed complained of late disbursement of funds to them.

(2) Observation: One observed the way the existing system works from the purchase of application form, submission, processing, approval and disbursement of funds, which has to be done especially satisfying the conditions for loan approval and disbursements. This can hardly go well with computerization of a system. Therefore, there is urgent need for simplifying and computerizing the system.

(3) Record Review: This involves the study of organizational charts, procedures, manuals and statistics. These were studied during the investigation and results gathered enhanced the designing of the new system.

Facts gathered were appropriately recorded as regards to each problem area.

ELEMENT OF SYSTEM SYSTEM

The considered items in system design are stated below:

(1) Input Design:

This is necessitated by the output requirement by specifying which data the system operator directs the system on the action to take. Consideration is given to the following in this design. They are:

(i) Type of input media

(ii) Data collection methods

(iii) Design of input layout

(iv) Volume of input documents.

In input design, data placement, headings and titles display are especially looked with.

(2) Output Design:

In any system design, the output requirement is what formed the design of the system. For this reason, it is determined first and then, the input requirement about how the design can best be sought for. The output is the end result generated from the system and it is this result that determines how effective and useful the system is to the organization. With the design, consideration is given to what is required from the system before deciding on how to set about producing it.

During the design, the following were determined:

(a) How often are they required?

(b) Who needs the output and in what form?

(c) Are the multiple copies needed for circulation within and outside the organization?

(d) Are pre-printed forms needed like in the case of pay slip?

3. File Design:

This system design is concerned with the file structure and organization. The file handling depends on input/output requirement and data volume to be retained in the system for reference purposes or updating:

(i) arrangement for easy access

(ii) sensible size for an output file

(iii) suitable storage facility

(iv) file security.

The four files used in this system are: -

(a) Interest

(b) Loan disbursement

(c) Loan repayment

(d) Outstanding loan.

4. Procedure:

The procedure unifies and links the processes involved to produce the desired results have been considered, both machine and manpower (clerical and computer procedure). They involve steps, which start with the organization using the source document, and ends with the output document being distributed.

Apart from the above four explained design, other essential contents of system design is:

(i) Preliminary information contents, name of those who can change files, programs etc.

(ii) Objectives of the systems department involved and benefits.

(iii) System description, which includes detailed procedures both clerical and consulting using flow chart where applicable.

(iv) Detailed specification of input files, output files, master files, source document and output document.

(v) Time scale for getting the system working.

(vi) Plans to enable a smooth changeover from the old to the new system.

Any system designed is required to produce information or details that state how a system can meet the requirements identified when studying the system. The design of the system is informed by the output on what it will produce which further enhances the specification of input data in the system to be developed.

4.3 DATA MODELLING

The structure of files have been clearly stated and data are separated according to files for easy access, items of different nature are handled separately for recording in the files and relationship between there established data using the base keys.

The main items of file structure are:

a. Field

b. File name

c. Type

d. Width

e. Decimal

A typical example is stated as follows:

FIELD	FILE NAME	TYPE	WIDTH	DECIMAL
1	Loan number	M	4	0
2	Name of client	B	10	0
3	Project type	B	6	0
4	Amount approved	B	10	0

5	Date approved	D	8	0
6	Date of disbursement	D	8	0
7	Duration of loan	C	10	0
8	Amount disbursed to-date	N	10	0
9	Repayment	N	8	0
10	Balance outstanding	D	10	0

If mistakes can be avoided in recording data or in doing a particular function, some of the mistakes may be minor and if care is taken, the mistakes may be serious, which may result in erasing of data or the system can turn out to a different thing entirely. Therefore, provision for these have been given so as to arrest situation, in case it occurs. For example, there is room for displaying to correct, recall and confirm before saving, password for sensitive areas to allow only authorize users in the system and have direct access for security reasons.

4.4 IMPLEMENTATION

Implementation is very important when it is proper in order to have a reliable system that will meet organizational needs. It involves the co-ordination of all those activities that takes place in the user's department and data processing department to get the new system into operation. The system may be entirely new, replacing an existing manner, semi-automated or completely automated system or a major modification to an existing system.

Implementation however, will have to take the following factors and consideration.

A. Change-over procedure or conversion:

This process involves changing from the old system to the new system. The best way of handling this includes:

(i) Parallel system: where both systems are run concurrently using the same input and output is resolved. The output of the old system continues in circulation until the new system in place is satisfied, so that when the old system is discarded, the new one takes over. This conversion method guarantees a good output. The disadvantages of this method are:

(a) Users who know that they can fall back to the old system, especially if they preferred the old system than the one, may not give room for testing and time to mature.

(b) Because of the two sets of system, the cost involved is double.

(ii) Direct cutover: This is the direct and abrupt change from the old to the new system. It is otherwise called one to one change. It becomes operational immediately the change over may be over, a weekend or overnight. Lack of having a system to fall back on becomes a serious disadvantage, if problems arise and this may lead to stoppage of operation in the organization.

(iii) Pilot scheme: When an organization wants to introduce a system, part of it may be introduced in a section of the organization, say a department. For example, the computerization of Intercity Bank commenced from one branch to another. A specialized team who carry on the implementation process then handles this. When it is considered complete and accurate, they move on to another branch.

(iv) Phase in method: The method is used when the installation of a new system is not feasible within an organization at any one time. File conversion, training of personnel or placement arrival of equipment are the possible factors which delays the implementation of a new system in good time.

(B) Training of Personnel:

The success or failure of any system depends largely on the users. The operator of the system must have detailed knowledge of their roles and have the skills on how to operate the system. That is why; the type of training received by various categories of personnel assist or prevents the successful implementation of any system. The training system for operators, must ensure that they are able to handle possible operations as required, they should also be able to handle possible operations as required, they should be able to handle correct data entry. When the situation falls on how to install machine, such as new computer or a special terminal training should taken into consideration, effect handling of the machine. The training should also take into cognisance

how to use electrical terminal. The operator should know likely areas of problems and where to seek for help. In short, the training should be comprehensive enough as to provide a good understanding of all the operational techniques of the new system.

4.5 POST IMPLEMENTATION

This referred to the review of any system or project that has been fully implemented. It is the X-ray of the system to ascertain whether it has conformed with the laid down implementation procedures. Analyst and the user of the system usually do review of a system. The review gives room for determining how well the system is working, its acceptability and to see where modification is required; also it enables management to know how the system will be maintained, since depreciation are bound to take place.

The focus of the post implementation is to ascertain whether the set objective for which it was designed has been achieved. For example, has the productivity level of the system improved? Analysts ask certain questions in order to obtain or gather correct information about the system being reviewed.

(i) How relevant is the information?

(ii) How accurate is the information?

(iii) What is the timeliness of the information?

(iv) Is the system easily adaptable?

(v) How complete and appropriate is the information?

The answers to the above questions help the analyst to determine the success of the system and the necessary steps to be taken in case of lapses.

For a system to be acceptable by the users, it must be quite good for what it is designed for and must succeed. This will enable the user to be confident and to all that can be done to maintain the system thereby lasting longer.

4.6 SYSTEM REVIEW

There are different methods used when it comes to data collection about a new system such as interview, observation, review of manuals and records. Some other information gathered are from handling of payment, receipt and entry on the ledger

cards necessitating the design of the system. The system to be installed was surveyed and performance known through the following questions:

(i) What is the general feeling about the system?

(ii) What are the effects of change over?

(iii) What is the volume of work before and now?

(iv) What is the quality of work?

(v) Is the new system acceptable?

(vi) How is the cost compared with the benefit?

Careful examination of these questions will help to determine the importance and acceptability of the new system.

4.7 MAINTENANCE

Maintenance is very important to any developed system. As the human body, if poorly maintained, can degenerate and subsequently lead to untimely death. So too is improper use of any developed system. Therefore, proper maintenance is essential and can take the form of servicing the machine, training of personnel to be more practical and efficient, replacing bad parts and even introducing modern equipment that can perform well on the system.

When modern software is being used, it is recommended that overhauling of the system should be done three times in a year. In the case of Intercity Bank, the case study of the Agricultural Loan Department is grouped into eight from approval condition up to disbursement and loan repayment.

The existing system, which is lacking behind in terms of effectiveness and accuracy needed to be reorganized using modern technology, which requires the use of computers. There is need to improve on the bank's operations mostly in the Agricultural Loan Department. Special focus should be on the new system for file management, which tried to look at the effective management of rate of approval, date of first instalment disbursed, amount repaid, and amount outstanding from any particular file. Also, how the new system could be used for retrieval and updating of information.

A database management system (Microsoft Foxpro) has been designed with the aim of reducing paper work to just punching of computer keys to increase effectiveness, accurately, timeliness and proper control by management.

CHAPTER FIVE

5.1 CONCLUSION

A database management system has been developed for file management in the agricultural loan department of Intercity Bank. This system, if properly managed, will bring about accuracy; effectiveness, information dissemination, proper planning and workers morale could be sustained.

It is required that the system be harnessed and areas like interest data should be such that could be redesigned anytime as changes in interest rates occur, file structure and defaulter screen should be developed so that as soon as a loan falls due and not paid, it can be called via defaulter screen. It should be known that no system is static as new ideas and development comes into banking industry so shall the system be redesigned in conformity with the development.

All personnel in the Bank should be given good training in a way that they can be moved around within the organization to serve in any department, this type of training provide flexibility and free flow of information and productivity will be high.

In this regard, management is therefore advised to provide the necessary support such as providing stand-by generators as alternative source of power, periodic service of the terminals and sending operating staff of the information technology department on course for proper training as to the latest development in the software industry.

5.2 RECOMMENDATION

Based on my study, it is recommended that:

1. The Bank should immediately computerize the Agricultural Loan Department to:

   Reduce the workload of manual operations, as one person can effectively handle a job of three persons.

   (a) Save cost by avoiding wastage of stationery items in manual operations.

   (b) Ensure data security, which is less or absence in manual operations.

(c) Ensure fastness and efficiency in processing data and the output.

2. The staff should be given adequate and good training on the operations and maintenance of computer systems.

3. There should be tri-annual overhauling of the computer systems.

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3. GRAHAM W. - MASTERING COMPUTER MACMILLAN EDUCATION LIMITED LONDON 3RD EDITION (1998)

MANUAL

1 ALEGE UMARU/ISAH AGBADI - INTERCITY BANK OPERATIONAL MANUAL ON SMALL AND LARGE SCALE LOAN (UNPUBLISHED), 1994

2. BADAMOSI, R. O. - SYSTEM ANALYSIS AND DESIGN LECTURE NOTES (1996) (UNPUBLISHED) F.U.T. MINNA

3 RAHIM, O. K. - DATABASE MANAGEMENT SYSTEM, LECTURE NOTES (UNPUBLISHED) F.U.T. MINNA (1996)

APPENDIX (i)

INPUT REQUIREMENT FOR AGRICULTURAL LOAN APPROVAL

1. NAME OF APPLICANT:

2. AMOUNT APPLIED FOR:

3. PURPOSE OF LOAN:

4. AGE OF APPLICANT:

5. FARM LOCATION:

6. THREE RECENT PASSPORT PHOTOGRAPH OF APP

7. ADDRESS OF THE APPLICANT

8. SECURITY/PROPERTY OFFERED

9. SATISFACTORY BANK STATUS REPORT OF APPLICANT

APPENDIX (ii)

INPUT REQUIREMENT FOR LOAN DISBURSEMENT

1. Submission of a copy of feasibility report.

2. Clearance certificate from Intercity Bank Legal Department.

3. Submission of property pledged.

4. Submission of customer's letter acceptance.

5. Submission of insurance policy certificate of the property pledged.

6. Submission of insurance policy from Nigeria Agricultural Insurance Company (NAIC).

7. Pre-take off report/implementation plan.

APPENDIX (iii)

INTEREST RATES

The interest rate is prime lending rate or as may be stipulated by Central Bank of Nigeria (C. B. N).

APPENDIX (iv)

CONTENTS OF THE BANK IMPLEMENTATION REPORT

1. Loan particulars

2. Schedule of planned and actual disbursements.

3. Schedule of planned and actual achievement in targets and timing.

4. Repayment projects including a repayment schedule based on current position and projection.

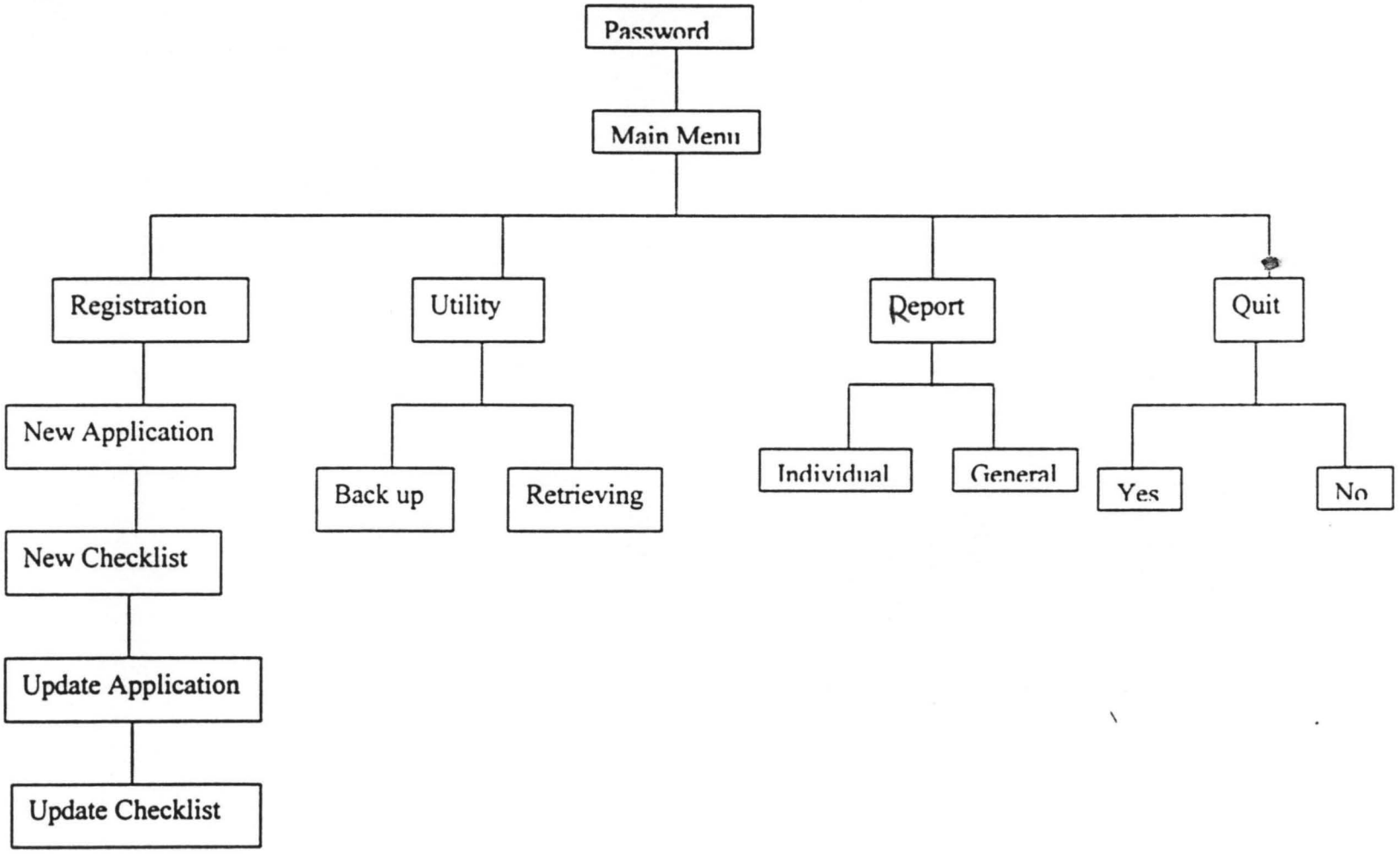
5. Comment of clients on loan approval and implementation and prospect for repayment.

6. Details of property mortgaged and their conditions.

7. General comments and conclusions.

8. Recommendations

BLOCK CHART


Password
Main Menu
Registration
Utility
Report
Quit
New Application
Back up
Retrieving
Individual
General
Yes
No
New Checklist
Update Application
Update Checklist

DATA INPUT 2 (OFFICIAL)

CHECKLIST	COMMENTS	VALUE OF SECURITY
Memorandum and Articles Of Association		
Borrowing power - Company		
Borrowing power - Directors		
Date registered		
Balance sheet		
Board Resolution		
Accounts statistics		
Cash security		
Debenture – stamped		
-- registered		
Stock/Machinery insurance		
Interest of bank noted		
Guarantee of directors		
Other guarantees		
Documentary credit - margin		
- statistics?		
- date		
Hypothecation – insurance		
- interest noted		
L.A.D. coding		
Life Assurance	Policy charged	
- Premium paid?		

- Mortgage – Legal/Equitable _____

-- Perfect? _____

Stock and shares charged? _____

Status Reports:

GENERAL DATABASE FILE

S/No	Name	Type	Width	Decimal	Index
1.	Reference number	Character	10		
2.	Name – app	"	20		
3.	B – add	"	30		
4.	Occ – app	"	20		
5.	Name – ban	"	20		
6.	Add – ban	"	30		
7.	L – amt	Numeric	15	2	
8.	Bank – a	Character	20		
9.	Bank – b	"	20		
10.	Bank – c	"	20		
11.	Add – a	"	20		
12.	Add – b	"	30		
13.	Add – c	"	30		
14.	Amt – a	Numeric	30	2	
15.	Amt – b	"	15	2	
16.	Amt – c	"	15	2	
17.	Rate – a	"	15	2	
18.	Rate – b	"	15	2	
19.	Rate – c	"	15	2	
20.	S – off a	Character	15		
21.	S – off b	"	20		
22.	S – off c	"	20		
23.	Fac	"	20		
24.	Meth	"	20		
25.	Rep – date	Date	20		
26.	D – sec	Character	8		
27.	P – loan	"	20		
28.	Loc – fam	"	20		
29.	T – land	"	30		
30.	T – deed	"	20		
31.	D – farm	"	20		
32.	T – farm	"	20		
33.	A – yield	Numeric	20	2	
34.	Y – exp	"	15	0	
35.	N – staff	"	5	0	
36.	Other – inf	Character	5		
37.	Y 1a	Numeric	20	0	
38.	Y 1b	"	4	0	
39.	Y 1c	"	4	0	
40.	Gross – a	"	4	2	
41.	Gross – b	"	15	2	
42.	Gross – c	"	15	2	
43.	Net – a	"	15	2	
44.	Net – b	"	15	2	
45.	Net – c	"	15	2	
46.	Yza	"	4	0	

47.	Yzb	"	4	0	
48.	Yzc	"	4	0	
49.	Onet – a	"	15	2	
50.	Onet – b	"	15	2	
51.	Onet – c	"	15	2	
52.	Inet – a	"	15	2	
53.	Inet – b	"	15	2	
54.	Inet – c	"	15	2	
55.	Pnet – a	"	15	2	
56.	Pnet – b	"	15	2	
57.	Pnet – c	"	15	2	
58.	Y3a	"	4	0	
59.	Y3b	"	4	0	
60.	Y3c	"	4	0	
61.	Pgross – a	"	15	2	
62.	Pgross – b	"	15	2	
63.	Pgross – c	"	15	2	
64.	9net – a	"	15	2	
65.	9net – b	"	15	2	
66.	9net – c	"	15	2	
67.	Date	"	8		
68.	Year	"	4	0	
69.	R – add	Date	30		
70.	As – at	Numeric	8		
71.	Creditors	Character	15	2	
72.	Loans	Date	15	2	
73.	Others 1	Numeric	15	2	
74.	Bal 1	"	15	2	
75.	L – stock	"	15	2	
76.	Produce	"	15	2	
77.	Mach	"	15	2	
78.	Debtors	"	15	2	
79.	1b	"	15	2	
80.	C – hand	"	15	2	
81.	Others 2	"	18	2	
82.	Bal 2	"	15	2	

OFFICIAL DATABASE FILE

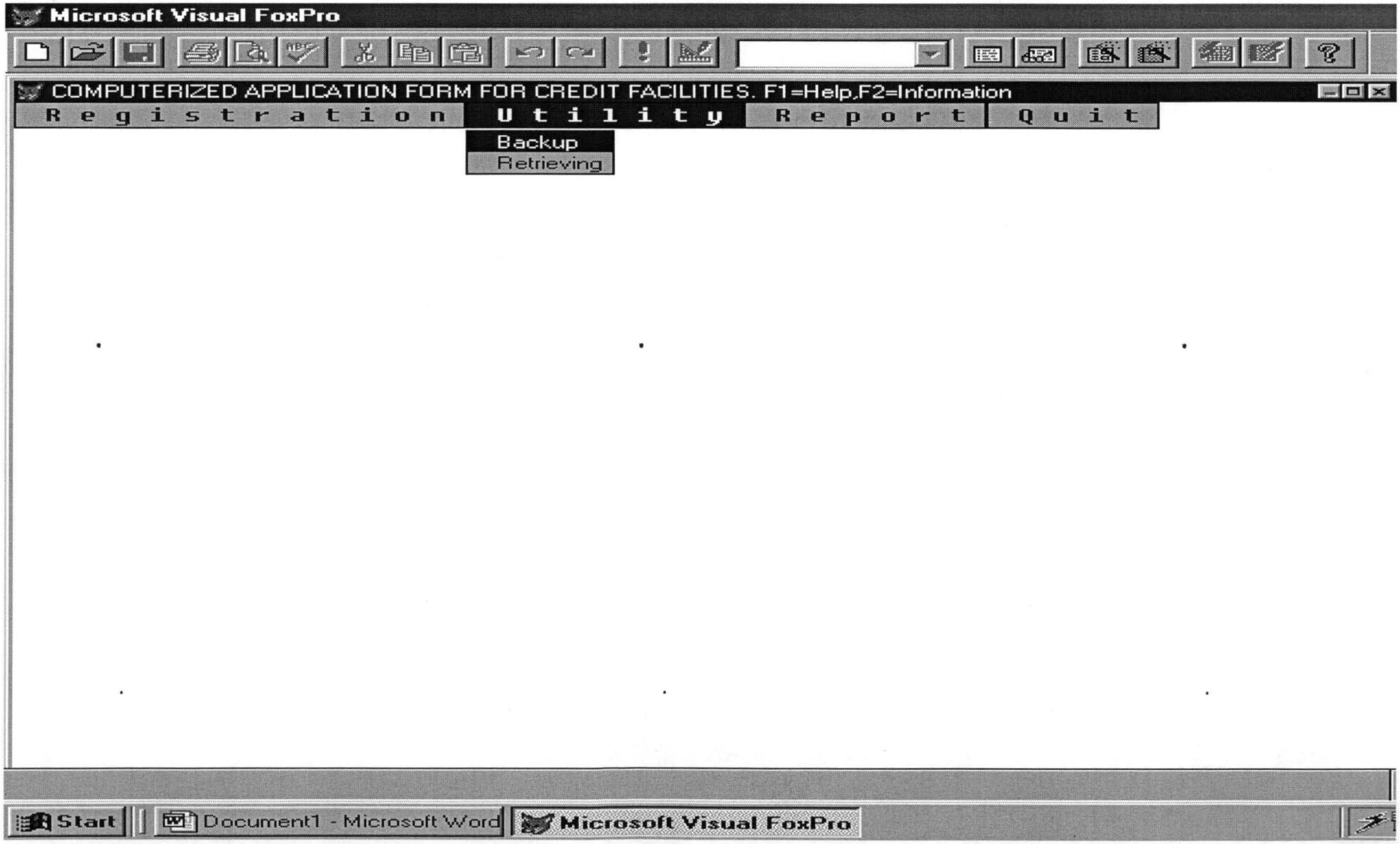
S/No	Name	Type	Width	Decimal	Index
1.	Reference number	Character	10		
2.	Com 1	"	20		
3.	Com 2	"	20		
4.	Val 2	Numeric	15	2	
5.	Com 3	Character	20		
6.	Val 3	Numeric	15	2	
7.	Com 4	Character	20		
8.	Com 5	"	20		
9.	Val 5	Numeric	15	2	
10.	Com 6	Character	20		
11.	Com 7	"	20		
12.	Val 7	Numeric	15	2	
13.	Com 8	Character	20		
14.	Val 8	Numeric	15	2	
15.	Com 9	Character	20		
16.	Com 10	"	20		
17.	Com 11	"	20		
18.	Com 12	"	20		
19.	Com 13	"	20		
20.	Val 13	Numeric	15	2	
21.	Com 14	Character	20		
22.	Val 14	Numeric	15		
23.	Com 15	Character	20	2	
24.	Com 16	"	20		
25.	Date 1	Date	8		
26.	Com 17	Character	20		
27.	Val 17	Numeric	15	2	
28.	Com 18	Character	20		
29.	Val 18	Numeric	15	2	
30.	Com 19	Character	20		
31.	Val 19	Numeric	15	2	
32.	Com 20	Character	20		
33.	Com 21	Character	20		
34.	Val 21	Numeric	15	2	
35.	Com 22	Character	20		
36.	Val 22	Numeric	15	2	
37.	Com 23	Character	20	2	
38.	Val 23	Numeric	15	2	
39.	Com 26	Character	20		
40.	Of – date	Date	8		
41.	Date 4	"	8		
42.	Val 20	Numeric	15	2	
43.	1 com	Character	20		

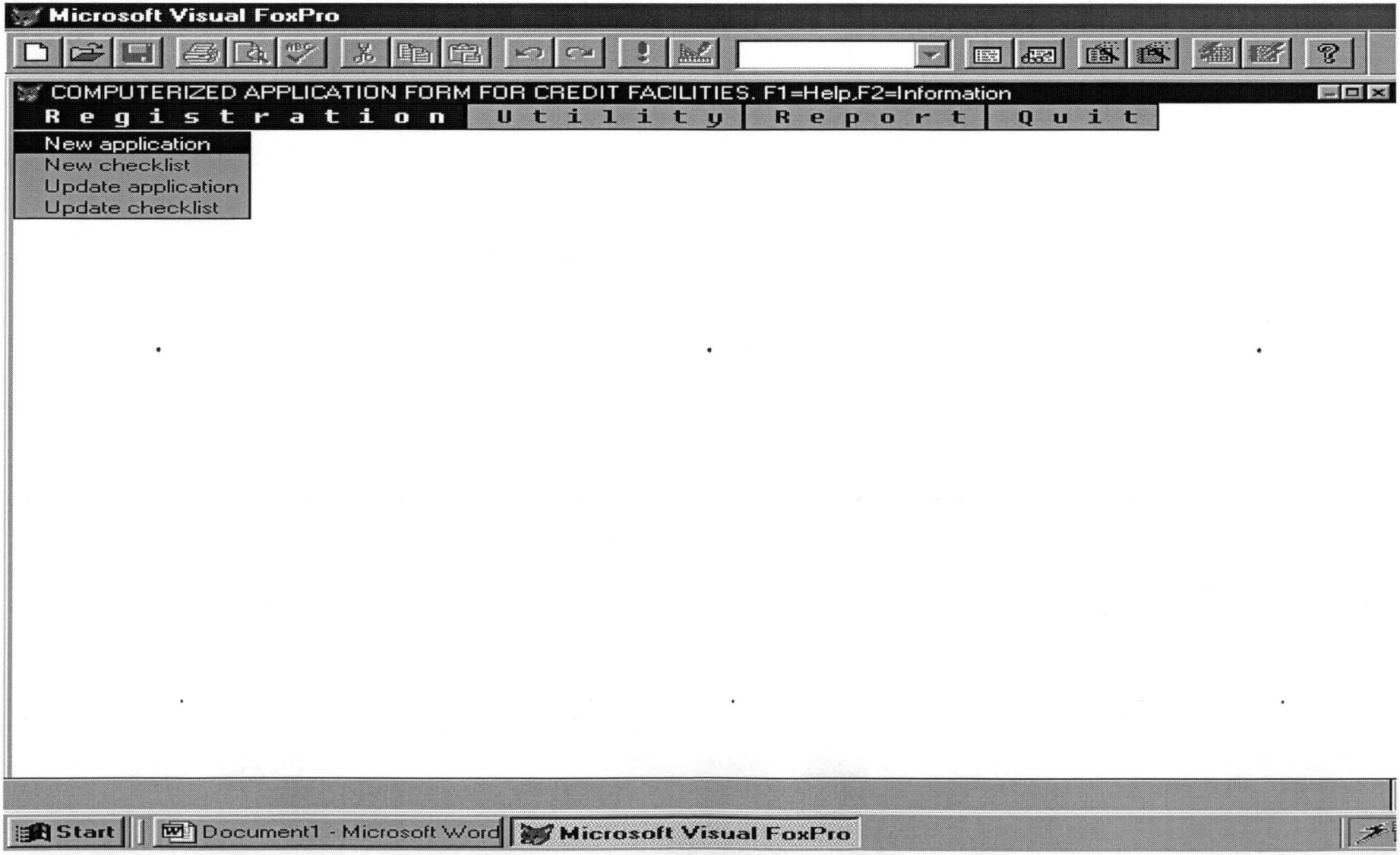
```
CLEAR ALL
CLEAR
SET SYSMENU OFF
SET SYSMENU TO
set date to brit
set safe off
SET ESCAPE OFF
set score off
set talk off
set exact off
on key label esc keyboard chr(13)
on key label esc do quit

do a:\agric\pass
deac windows all
emp = 0

ON KEY LABEL F1 DO help
ON KEY LABEL F2 DO info
 CLEAR
       define window MAIN from 0,0 to 50,80 panel  title 'COMPUTERIZED
APPLICATION FORM FOR CREDIT FACILITIES. F1=Help,F2=Information';
            CLOSE FLOAT GROW ZOOM
       activate window main

do while .t.

       do defmenu
       do reg
       do uti
       do rep
       EMP = 0

    activate menu barmenu
    RESTORE FROM MEM.VAR ADDITIVE
   if emp = 1
        DO USER_QUIT
   endif
ENDDO

PROCEDURE USER_QUIT
deactivate menu barmenu
deact popups all
deact menus all
deact windows all
release menu barmenu extended
set sysmenu to default
on key label esc
quit


Procedure defmenu
clear
define menu barmenu bar at line 8
define menu barmenu in window main
define menu barmenu font 'courier', 16
```

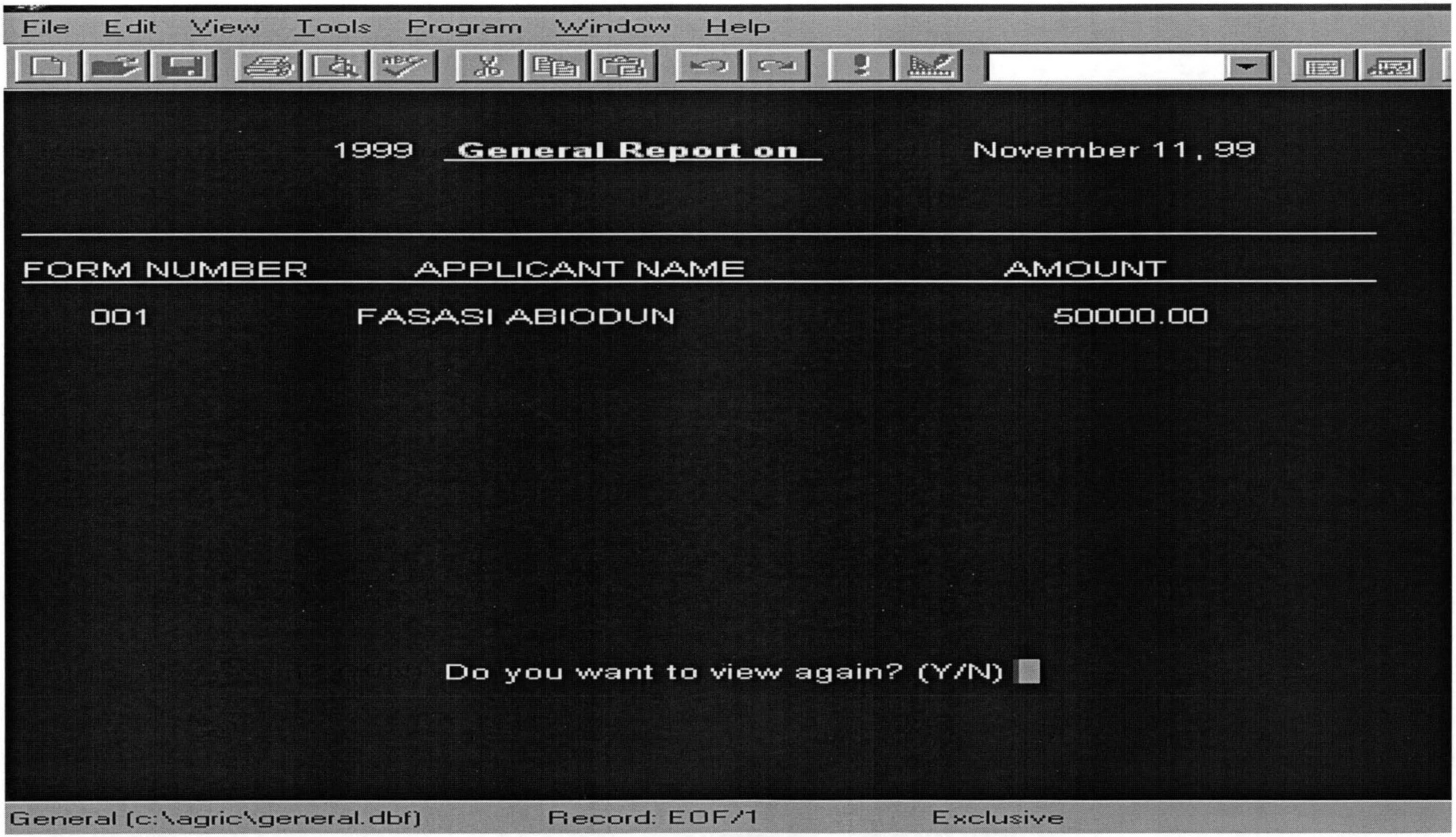
```
define menu barmenu style 'N'
define pad regpad of barmenu prompt 'R e g i s t r a t i o n' color scheme 4

define pad utipad of barmenu prompt 'U t i l i t y' color scheme 4

define pad reppad of barmenu prompt 'R e p o r t' color scheme 4

define pad quitpad of barmenu prompt 'Q u i t' color scheme 4



on pad regpad of barmenu activate popup reg
on pad utipad of barmenu activate popup uti
on pad reppad of barmenu activate popup rep
on selec pad quitpad of barmenu do quit


define popup reg margin relative
define bar 1 of  reg prompt "New application" color sche 3
define bar 2 of reg prompt "New checklist " color sche 3
define bar 3 of reg prompt "Update application" color sche 3
define bar 4 of reg prompt "Update checklist" color sche 3
on selection popup reg  do reg

define popup uti margin relative
define bar 1 of  uti prompt "Backup"  color sche 3
define bar 2 of  uti prompt "Retrieving" color sche 3
on selection popup uti do uti

define popup rep margin relative
define bar 1 of  rep prompt "Individual" color sche 3
define bar 2 of  rep prompt "General" color sche 3
on selection popup rep  do rep
activate menu barmenu
return

Procedure quit
 emp = 1
 SAVE TO MEM.VAR
define window quit;
   from 8,20 to 18,55 ;
   title 'QUIT';
   in window main ; && child window.
      CLOSE FLOAT GROW ZOOM;
      panel color rg+/w+
activate window quit
@ 0,0 to 5,45 double
@ 2,3 say [EXIT CREDIT FACILITIES SYSTEM?]
@ 3,1 to 3,32 colo r+/w+
SET COLOR TO GB+/W+,RG+/N+
ans = 0
do exi
activate menu exi
release windows quit

if ans = 1
```

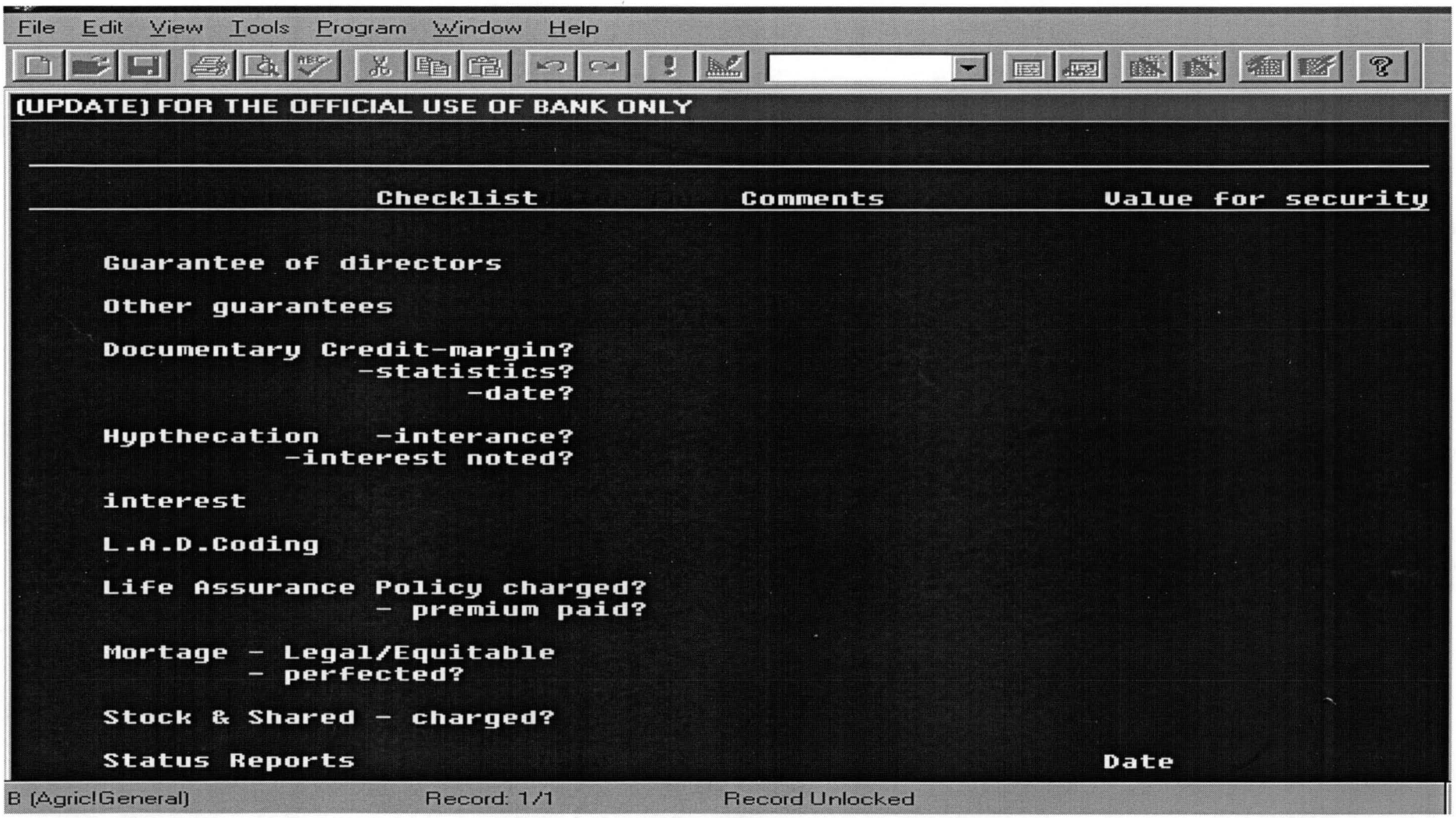
```
set bell to 3000,5
?chr(7)
set bell to 3000,5
?chr(7)
set bell to 1000,5
?chr(7)
set bell to 2000,5
?chr(7)
set bell to 3000,5
?chr(7)
set bell to 3000,5
?chr(7)
SET BELL TO 400,4
set cursor off
     define window cc from 17,20 to 21,60
 activate window cc
 @0,1 say 'Developed by: Funmi Bonire'
@1,1 say 'Registration No:PGD/MSC/373/97'
@2,14 say '(c) 1998'
@2,23 say chr(17)+chr(196)+chr(217) color g/b
@1,0 say ''
wait ''
set cursor on
deactivate window cc
RETURN
**
Procedure reg
do case
   case bar () = 1
        do a:\agric\new
      case bar()= 2
            do a:\agric\newcheck
      case bar()= 3
          do a:\agric\updnew
      case bar() = 4
           do a:\agric\updcheck
 endcase
 show menu barmenu
 show popup reg
 return

procedure uti
do case
      case bar () = 1

            do a:\agric\bac
      case bar () = 2
            do a:\agric\rec
endcase
show menus all
show popups uti
return


Procedure rep
do case
```

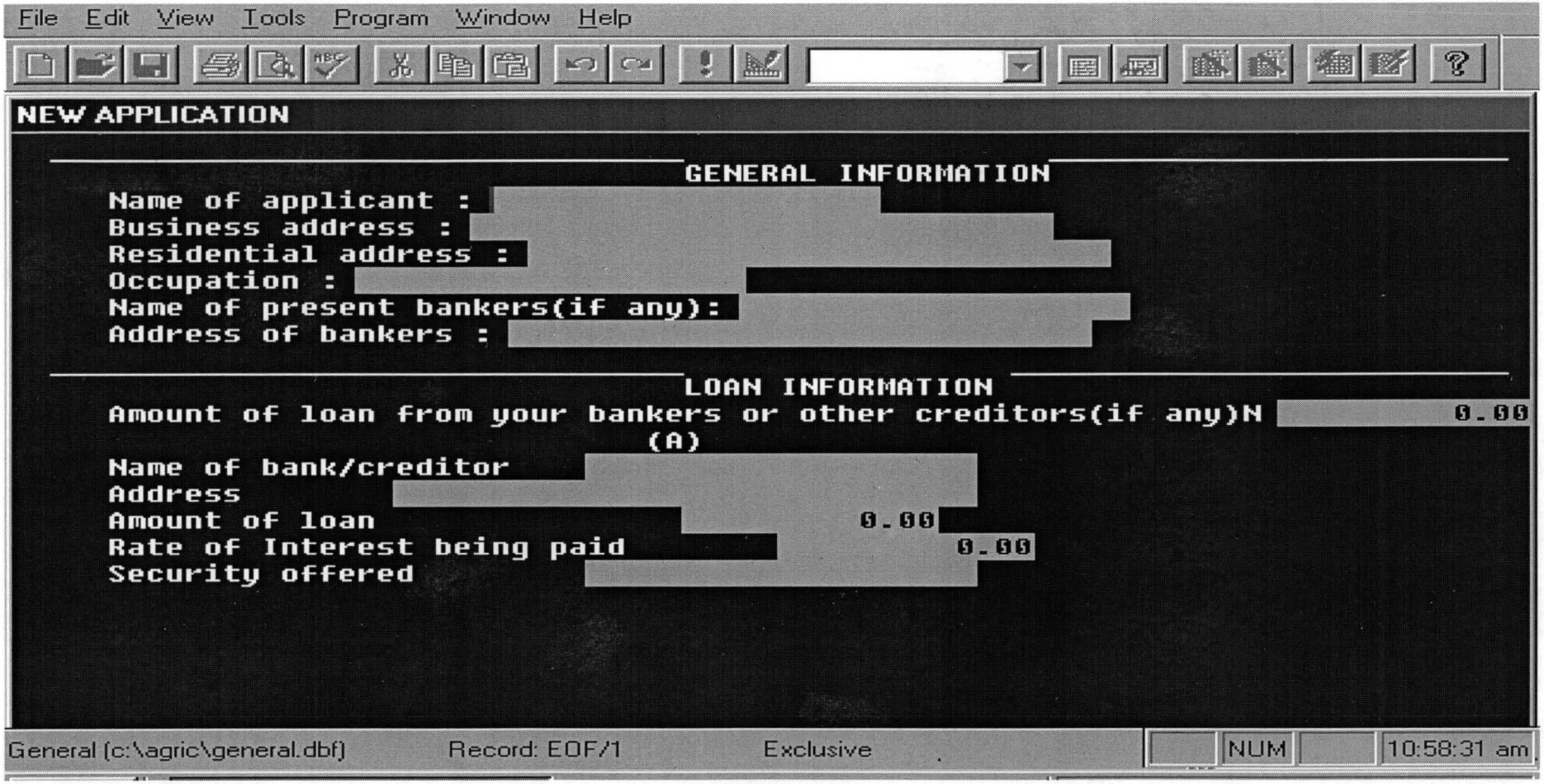
```
   case bar () = 1
       do a:\agric\ind
     case bar()= 2
           do a:\agric\gen

endcase
show menu barmenu
show popup rep
return
```

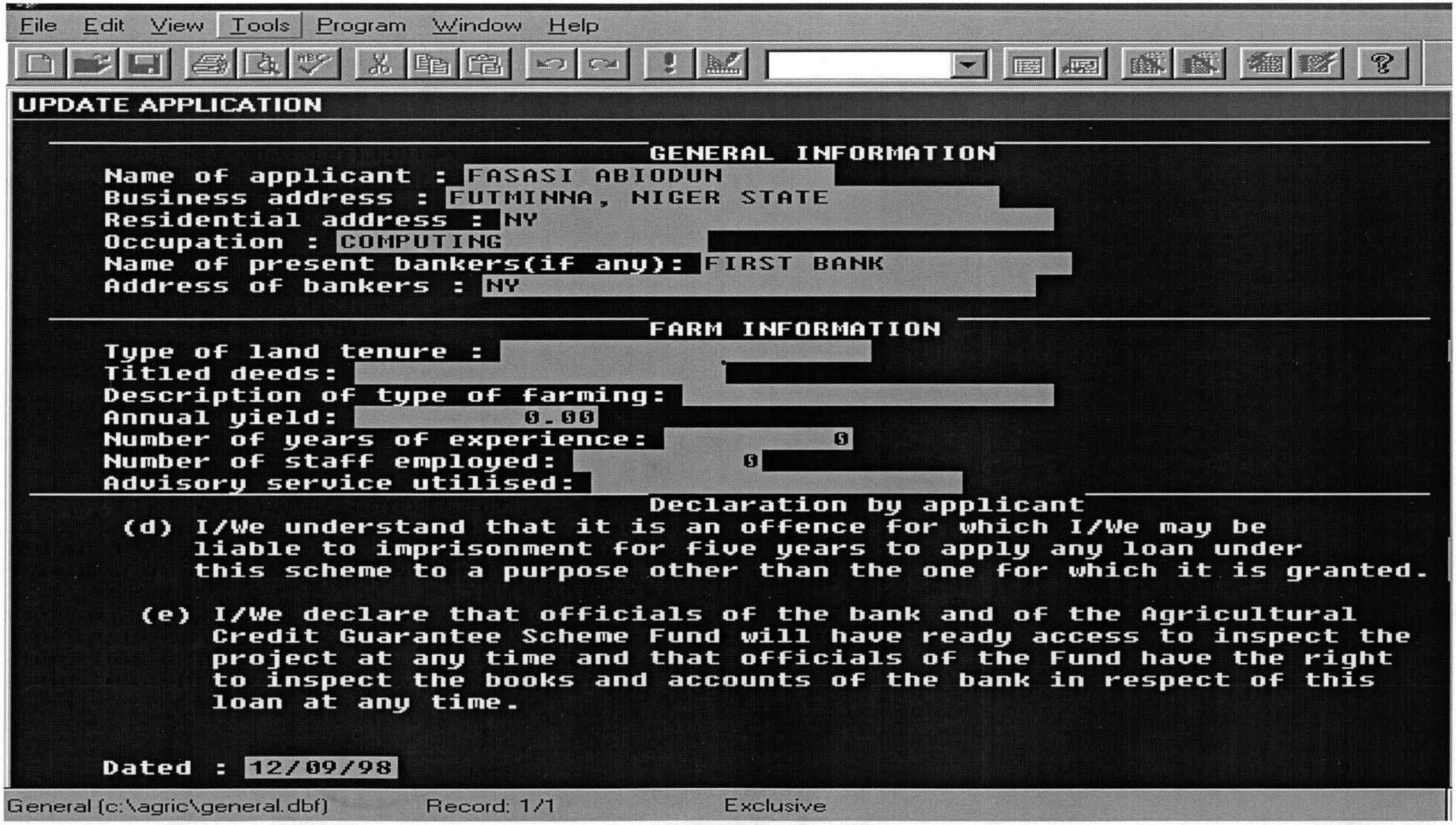

Microsoft Visual FoxPro
COMPUTERIZED APPLICATION FORM FOR CREDIT FACILITIES. F1=Help,F2=Information
Registration
Utility
Report
Quit
Backup
Retrieving
Start
Document1 - Microsoft Word
Microsoft Visual FoxPro


Microsoft Visual FoxPro
COMPUTERIZED APPLICATION FORM FOR CREDIT FACILITIES. F1=Help,F2=Information
Registration
Utility
Report
Quit
New application
New checklist
Update application
Update checklist
Start
Document1 - Microsoft Word
Microsoft Visual FoxPro


File Edit View Tools Program Window Help
1999 General Report on November 11, 99
FORM NUMBER APPLICANT NAME AMOUNT
001 FASASI ABIODUN 50000.00
Do you want to view again? (Y/N)
General (c:\agric\general.dbf) Record: EOF/1 Exclusive


File Edit View Tools Program Window Help
(UPDATE) FOR THE OFFICIAL USE OF BANK ONLY
Checklist
Comments
Value for security
Guarantee of directors
Other guarantees
Documentary Credit-margin?
-statistics?
-date?
Hypthecation -interance?
-interest noted?
interest
L.A.D.Coding
Life Assurance Policy charged?
- premium paid?
Mortage - Legal/Equitable
- perfected?
Stock & Shared - charged?
Status Reports
Date
B (Agric!General)
Record: 1/1
Record Unlocked


File Edit View Tools Program Window Help
NEW APPLICATION
GENERAL INFORMATION
Name of applicant :
Business address :
Residential address :
Occupation :
Name of present bankers(if any):
Address of bankers :
LOAN INFORMATION
Amount of loan from your bankers or other creditors(if any)N 0.00
(A)
Name of bank/creditor
Address
Amount of loan 0.00
Rate of Interest being paid 0.00
Security offered
General (c:\agric\general.dbf) Record: EOF/1 Exclusive NUM 10:58:31 am


File Edit View Tools Program Window Help
UPDATE APPLICATION
GENERAL INFORMATION
Name of applicant : FASASI ABIODUN
Business address : FUTMINNA, NIGER STATE
Residential address : NY
Occupation : COMPUTING
Name of present bankers(if any): FIRST BANK
Address of bankers : NY
FARM INFORMATION
Type of land tenure :
Titled deeds:
Description of type of farming:
Annual yield: 0.00
Number of years of experience: 0
Number of staff employed: 0
Advisory service utilised:
Declaration by applicant
(d) I/We understand that it is an offence for which I/We may be liable to imprisonment for five years to apply any loan under this scheme to a purpose other than the one for which it is granted.
(e) I/We declare that officials of the bank and of the Agricultural Credit Guarantee Scheme Fund will have ready access to inspect the project at any time and that officials of the Fund have the right to inspect the books and accounts of the bank in respect of this loan at any time.
Dated : 12/09/98
General (c:\agric\general.dbf) Record: 1/1 Exclusive